## PROCEEDINGS OF THE BIOLOGICAL SOCIETY OF WASHINGTON

## A NEW SPECIES OF RHINOPHYLIA (MAMMALIA, CHIROPTERA, PHYLLOSTOMATIDAE) FROM SOUTH AMERICA<sup>1</sup>

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Twelve specimens of *Rhinophylla* were collected in the province of Loreto, Peru, during the summer of 1964. Three of those specimens are referable to *R. pumilio* Peters, but the nine remaining specimens represent an undescribed species. For that species, I propose the name:

## Rhinophylla fischerae, new species

Holotype: adult female, skin and skull; no. 12102, Texas Cooperative Wildlife Collection; from 61 mi. SE Pucallpa, about 180 m, Loreto, Peru; collected 15 August 1964 by Dilford C. Carter and prepared by Robert W. Adams, original number 1221. Selected measurements in millimeters are: head and body, 46; forearm, 31.0; third metacarpal, 30.2; tibia, 10.6; calcar, 3.8; interfemoral membrane at midline, 3.6; foot, 8; ear, 15; total length of skull, 17.1; condylobasal length, 14.9; cranial breadth, 8.0; mastoidal breadth, 8.7; interorbital breadth, 4.9; maxillary toothrow, 4.5; greatest width across molars, 6.1; greatest width across canines, 4.6.

Description: A small species of Rhinophylla. Body coloration varies from medium gray, with slightly reddish overcast, to pale reddish brown; wing membrane very dark brown; ears and interfemoral paler brown; interfemoral membrane with conspicuous fringe of stiff hairs which extend 2 to 3 mm beyond membrane edge. Proximal one-half of forearm, legs, feet, and interfemoral membrane conspicuously hairy. First upper incisor (I¹) bilobed, medial lobe about twice lateral lobe size, and lacking lateral cingular style. Slightly worn I¹ with lobes indistinct and cutting edge entire. First lower premolar (presumably P₁) trilobed, but lobes indistinct when worn. P₁ lobes more or less equal in size, or

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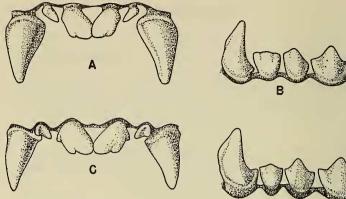


Fig. 1. Holotype of Rhinophylla fischerae (TCWC 12102 $\,^\circ$ ): A, frontal aspect of upper incisors and canines; B, lateral aspect of lower canine, premolars ( $P_1$  and  $P_4$ ), and first molar of the left ramus of the mandible. Rhinophylla pumilio (TCWC 12095 $\,^\circ$ ): C, frontal aspect of upper canines and incisors; D, lateral aspect of lower canine, premolars ( $P_1$  and  $P_4$ ), and first molar of the left ramus of the mandible.

central lobe slightly larger than anterior and posterior lobes, or posterior lobe largest with middle and anterior lobes progressively smaller. Weights of one male and three females: 6.7 (male), 6.5, 6.9, and 7.0 grams.

Comparisons: R. fischerae is smaller than R. pumilio; has an obvious fringe of stiff hairs along entire margin of interfemoral membrane; and has bilobed I¹, which lacks a lateral cingular style. In R. pumilio, the margin of the interfemoral membrane is essentially naked and I¹ has three or four lobes including a well-developed lateral cingular style, which is not lost as the tooth wears.

Measurements: See table 1.

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Distribution: Known from the type-locality and from the town of Pucallpa, Loreto, Peru. The specimens taken at the type-locality were caught in mist nets set on the moderately open floor of mature rain forest. The specimen from Pucallpa was taken in a mist net placed above a small pond at the local brick and roof tile factory. There was no forest near the factory.

Husson (1962, p. 152) placed the name Rhynophylla cumilis, Kappler, (1881, p. 163) in the synonomy of Rhinophylla pumilio after examining two specimens so labeled in the Staatliches Museum für Naturkunde, Stuttgart. The two specimens examined by Husson are apparently those referred to by Kappler (loc. cit.).

Table 1. Selected measurements in millimeters of nine specimens of *Rhinophylla fischerae*. No. 12104 is from Pucallpa, Peru, the others are from the type-locality.

	12096 ්	12097 රී	12098 ♀	12099 ♀	12100 Q	12101 ♀	12102 ♀	12103 ♀	12104 ♀	Mean
Head and body	45	45	44	47	43	48	46	45	47	45.5
Forearm	29.3	29.9	31.4	31.0	32.3	31.8	31.0	30.9	31.6	31.0
Metacarpal III	28.7	29.2	29.9	31.9	31.5	31.6	30.2	29.7	30.2	30.3
Greatest skull										
length	16.4	16.9	16.3	16.6	16.8	17.6	17.1	16.6	17.5	16.8
Condylobasal										
length	14.4	14.8	14.6	14.6	15.2	15.5	14.9	14.6	15.7	14.9
Cranial breadth	7.9	8.2	7.8	7.7	7.7	8.2	8.0	7.7	7.8	7.8
Mastoidal breadth	8.9	8.6	8.6	8.3	8.6	9.3	8.7	8.8	8.9	8.7
Interorbital										
breadth	4.6	4.9	4.7	4.8	4.7	5.0	4.9	4.7	4.8	4.7
Maxillary toothrow	4.4	4.5	4.5	4.3	4.6	4.7	4.5	4.4	4.6	4.5
Greatest width										
across molars	5.8	6.2	6.2	5.9	6.2	6.5	6.1	6.1	6.1	6.1
Greatest width										
across canines	4.4	4.7	4.5	4.6	4.2	4.7	4.6	4.5	4.9	4.5

Two males of *R. fischerae* taken 14 and 15 August had testes measuring 4 and 5 mm. One female taken on 14 August had an enlarged uterus which may have contained a very small embryo. None of the other females appeared to be pregnant. On 15 August, both *R. fischerae* and *R. pumilio* were caught in the same nets which were set on the forest floor.

I am especially grateful to Dr. Georg H. W. Stein, Institut für Spezielle Zoologie und Zoologisches Museum der Humboldt-Universität zu Berlin, for loaning me Peters' holotype of R. pumilio. Also I wish to thank Drs. Karl F. Koopman, American Museum of Natural History; Charles O. Handley, Jr., United States National Museum; and Joseph C. Moore, Chicago Natural History Museum, for the loan of specimens in their charge. Specimens deposited in the above institutions are denoted as follows: ZM, Zoologisches Museum; AMNH, American Museum of Natural History; USNM, United States National Museum; CNHM, Chicago Natural History Museum.

Etymology: The species R. fischerae is named in honor of Miss Sigrid Fischer who contributed significantly to the success of our collecting trip on the rivers of Ucayali and Tamaya.

Specimens examined: R. fischerae: PERU: 61 mi. SE Pucallpa, about 180 m, Loreto, 2 \$\delta\$, 6 \$\varphi\$, TCWC; Pucallpa, about 180 m, Loreto, 1 \$\varphi\$, TCWC. R. pumilio: VENEZUELA: Río Casiquiare, 250 ft., 1\$\delta\$, AMNH. BRAZIL: Peters' holotype, no definite locality, \$\varphi\$,

Table 2. The means and extremes in millimeters for selected variates of R. pumilio

Variate	Mean	Extremes	No. and sex
Head and body	50.0	47 –54	488+ 299
Forearm	34.1	33.0-36.3	588+ 399
Metacarpal V	32.4	31.0-34.4	1588+1099
Greatest skull length	19.1	18.7-19.5	1388+ 999
Condylobasal length	17.1	16.8-17.5	10 8 8 + 5 9 9
Cranial breadth	8.4	8.1- 8.8	1388+1199
Mastoidal breadth	9.3	9.1- 9.5	1388+1199
Interorbital breadth	4.8	4.6- 5.2	15 8 8 + 13 ♀ ♀
Maxillary toothrow	5.2	5.0- 5.4	1488+ 899
Greatest width across			
molars	6.5	6.2- 6.9	1688+1299
Greatest width across			
upper canines	4.7	4.5- 5.0	1588+1299

## LITERATURE CITED

Husson, A. M. 1962. The bats of Suriname. Zoologische Verhandelingen, no. 58: 282 pp., 30 pls.

Kappler, A. 1881. Holländisch-Guiana. Erlebnisse und Erfahrungen während eines 43 jährigen Aufenthalts in der Kolonie Surinam. Stuttgart, x + 495 pp., 1 pl., 1 map.